Amendments to the Claims

1. (currently amended) A method for performing beating-heart closed-chest surgery on a patient to connect a graft vessel to at least one target vessel, comprising:

creating at least one point of entry into the thoracic cavity;

gaining access to a distal anastomotic site;

stabilizing the heart by inserting ~~a tool~~ through at least one point of entry an integrated stabilizer connected to a tool~~, said tool including an anvil~~;

~~inserting said anvil through the wall of a target vessel into the lumen of the target vessel;~~ and

performing a distal anastomosis between an end of the graft vessel and the side of the target vessel with said tool while the heart is beating.

2. (previously presented) The method of claim 1, wherein said performing a distal anastomosis comprises:

attaching the graft vessel to the target vessel; and

creating an opening in the target vessel.

3. (previously presented) The method of claim 2, wherein said attaching comprises stapling the graft vessel to the target vessel.

4. (cancelled)

5. (previously presented) The method of claim 1, further comprising moving said anvil against the wall of the target vessel.

6. (previously presented) The method of claim 45, wherein said performing a proximal anastomosis comprises:

placing an end of a tool substantially normal to the target vessel, said tool holding the graft vessel; and

deploying an anastomosis device to attach the graft vessel to the target vessel.

7. (original) The method of claim 6, further comprising splitting said tool to release the graft vessel.

8. (original) The method of claim 1, wherein said creating comprises utilizing a sub-xyphoid approach.

9. (withdrawn) The method of claim 1, wherein said creating comprises utilizing an intercostal approach.

10. (previously presented) The method of claim 45, further comprising measuring the distance between the proximal anastomosis site and the distal anastomotic site with a vein measuring device inserted through at least one point of entry into the thoracic cavity.

11. (previously presented) The method of claim 1, further comprising deploying a trocar port in at least one point of entry into the thoracic cavity.

12. (original) The method of claim 1, wherein said gaining access comprises creating an opening in the pericardium, wherein the opening extends substantially from the aorta to the

apex of the heart.

13. (original) The method of claim 1, wherein said gaining access comprises accessing the intrapericardial space.

14. (previously presented) The method of claim 1, wherein said performing a distal anastomosis further comprises attaching a clamp assembly to the distal end of the graft vessel.

15. (original) The method of claim 14, further comprising slicing the distal end of the graft vessel.

16. (currently amended) The method of claim 14, further comprising connecting ~~the~~ said clamp assembly to ~~a distal anastomotic~~ said tool.

17. (previously presented) The method of claim 45, further comprising viewing the anastomosis sites during the procedure.

18. (previously presented) The method of claim 1, further comprising performing at least one additional distal anastomosis.

19. (withdrawn) A method for performing closed-chest surgery on a patient to connect a graft vessel to target vessels, comprising:

cutting at least one opening in an intercostal space of the patient;

performing a proximal anastomosis between the graft vessel and one target vessel,

utilizing an at least partially splittable tool inserted through one opening; and

performing a distal anastomosis between the graft vessel and another target vessel, utilizing a tool inserted through one opening.

20. (withdrawn) A surgical tool for performing an anastomosis, comprising a splittable crown at the distal end of the tool.

21. (withdrawn) The surgical tool of claim 20, further comprising at least one additional tube substantially coaxial with and slidable relative to said crown.

22. (withdrawn) The surgical tool of claim 21, wherein retraction of said at least one additional tube allows the expander to split and release a graft vessel.

23. (withdrawn) The surgical tool of claim 20, further comprising

a channel in said crown; and

a pin extending through said channel, wherein removal of said pin allows said crown to split.

24. (withdrawn) The surgical tool of claim 20, wherein said crown is hinged substantially longitudinally.

25. (withdrawn) The surgical tool of claim 20, further comprising a splittable expander within said crown.

26. (withdrawn) The surgical tool of claim 20, further comprising an anastomotic device connected to the distal end of said crown, said anastomotic device comprising:

a splittable discard section connected to said crown; and

a deployable section detachably connected to said discard section.

27. (withdrawn) A surgical tool for performing an anastomosis, comprising a splittable expander at the distal end of the tool.

28. (withdrawn) The surgical tool of claim 27, further comprising at least one additional tube substantially coaxial with and slidable relative to said expander.

29. (withdrawn) The surgical tool of claim 27 wherein retraction of said at least one additional tube allows the expander to split and release a graft vessel.

30. (withdrawn) A surgical tool for performing an anastomosis, comprising a shaft having an articulated end.

31. (withdrawn) An integrated stabilizer, comprising

a head;

a distal anastomotic tool connected to said head; and

wherein said head stabilizes the surface of the heart relative to said distal anastomotic tool.

32. (withdrawn) The integrated stabilizer of claim 31, further comprising an epicardial dissector connected to said head.

33. (withdrawn) The integrated stabilizer of claim 31, wherein said epicardial dissector

comprises a rotatable blade movable relative to the surface of the heart.

34. (withdrawn) The integrated stabilizer of claim 31, wherein said head stabilizes a portion of the heart relative to said distal anastomotic tool by tracking the motion of the beating heart.

35. (withdrawn) The integrated stabilizer of claim 31, wherein said head stabilizes a portion of the heart relative to said distal anastomotic tool by engaging both the chest wall and the heart and tensioning a portion of the surface of the heart.

36. (withdrawn) The integrated stabilizer of claim 31, further comprising attachment structures for anchoring said head to the heart during the anastomosis procedure.

37. (withdrawn) The integrated stabilizer of claim 36, wherein said attachment structures comprise clips deployable from said head.

38. (withdrawn) The integrated stabilizer of claim 37, wherein said head further comprises a plurality of clip deployers, and wherein said clips are deployed from said clip deployers.

39. (withdrawn) The integrated stabilizer of claim 36, wherein said attachment structures comprise at least one suction port.

40. (withdrawn) The integrated stabilizer of claim 31, wherein said head further comprises at least one cam path defined therein, and wherein said distal anastomotic tool further comprises at least one cam follower engaging each said cam path.

41. (withdrawn) The integrated stabilizer of claim 31, further comprising at least one cable connected to said distal anastomotic tool, said cable configured to actuate said distal anastomotic tool.

42. (withdrawn) The integrated stabilizer of claim 31, further comprising a viewing apparatus connected to said head for viewing the distal anastomotic site.

43. (withdrawn) The integrated stabilizer of claim 42, wherein said viewing apparatus comprises an endoscope.

44. (withdrawn) A surgical tool, comprising:

an integrated stabilizer; and

a linkage connected to said integrated stabilizer, said linkage switchable between a substantially compliant state and a substantially noncompliant state.

45. (previously presented) The method of claim 1, further comprising performing a proximal anastomosis between the graft vessel and another target vessel while the heart is beating, utilizing a tool inserted through at least one point of entry.

46. (previously presented) The method of claim 45, wherein said proximal anastomosis is sutureless.

47. (previously presented) The method of claim 1, wherein said distal anastomosis is sutureless.

48. (new) The method of claim 1, wherein said stabilizing includes securing the integrated stabilizer to the heart.

49. (new) The method of claim 48, wherein said securing includes deploying at least one clip from said integrated stabilizer to engage the heart; further comprising removing at least one said clip after said performing.

50. (new) The method of claim 48, wherein said securing includes exerting a force against both the heart and the chest wall, whereby said force restricts motion of the heart.

51. (new) The method of claim 1, wherein the integrated stabilizer includes a shell having an open space therein.

52. (new) The method of claim 51, wherein said tool is positioned substantially within said open space of said integrated stabilizer during said performing.

53. (new) The method of claim 1, wherein said integrated stabilizer has a substantially oval perimeter configured to contact the heart.

54. (new) The method of claim 1, wherein said integrated stabilizer includes an integrated endoscope.

55. (new) The method of claim 1, wherein said integrated stabilizer includes an integrated light source.

56. (new) The method of claim 1, further comprising a linkage connected to said integrated stabilizer, wherein said linkage extends out of at least one point of entry during said stabilizing and said performing.

57. (new) The method of claim 1, wherein said tool includes an anvil, and wherein said performing comprises inserting said anvil through the wall of and into the lumen of the target vessel.